ACCIDENT

Aircraft Type and Registration:	i) Robinson R22 Beta, G-CDBGii) Robinson R44 Astro, G-OLOW
No & Type of Engines:	i) 1 Lycoming O-360-J2A piston engineii) 1 Lycoming O-540-F1B5 piston engine
Category:	2.3
Year of Manufacture:	i) 2004 ii) 1994
Date & Time (UTC):	24 April 2005 at 1010 hrs
Location:	Sherburn-in-Elmet, Leeds
Type of Flight:	i) Trainingii) Training
Persons on Board:	i) Crew - 2 ii) Crew - 2 Passengers - None Passengers - None
Injuries:	i) Crew - None Passengers - N/A ii) Crew - None Passengers - N/A
Nature of Damage:	i) Main rotor blades damaged and engine shock loadedii) Main rotor blades damaged and engine shock loaded
Commander's Licence:	i) Airline Transport Pilot's Licence with Instructor ratingii) Private Pilot's Licence with Instructor Rating
Commander's Age:	i) 62 yearsii) 47 years
Commander's Flying Experience:	 i) 16,500 hours (of which 8,000 were on type) Last 90 days - not known Last 28 days - not known ii) 2,500 hours (of which 990 were on type) Last 90 days - not known Last 28 days - not known
Information Source:	Aircraft Accident Report Forms submitted by the pilots

History of the flights

On the morning of the accident an instructor parked an R22, G-CDBG, at the refuelling area. After he parked the R22 another instructor parked an R44, G-OLOW,

next to the R22. Later in the morning the instructor, who had earlier parked the R44 next to the R22, briefed a student to go out and pre-flight and start-up the R22 in

preparation for a local training flight. After the student had started the R22 the instructor joined him and just prior to lift off there was a sudden bang and a massive vertical vibration. As the instructor was closing down the helicopter he realised that the main rotor blades of his helicopter had collided with those of the R44 which had just started up.

The instructor, who had parked the R22 earlier in the morning, was tasked to fly the R44 with another pilot for type conversion training. When the instructor and conversion pilot arrived at the R44 it was found that the check list was missing. The instructor returned to the flying club to find the check list whilst the conversion pilot carried out the external pre-flight check. As part of the external check the conversion pilot rotated the

main rotor blades through 180° to ensure that there was sufficient tip clearance from the adjacent R22. At this time the R22 had not been started. The instructor returned with the check list, completed the internal checks and proceeded to start the R44. As he did so its main rotor blades contacted those of the now running R22. The R44 was shutdown. The instructor of the R44 wrongly assumed that the pilot who had previously parked the R44 had left adequate clearance between it and the R22.

Safety action taken

Since this accident the operator has painted measured parking spots in the refuelling area